AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1-53 (Cancelled)

54. (Previously presented) The method of claim 81, wherein the electromagnetic waves are laser light.

55. (Cancelled)

56. (Previously presented) The method of claim 75, wherein the temperature of the solvent and the temperature of the transport units applied to the support is less than 50° C.

57. (Previously presented) The method of claim 75, wherein the transport units have a particle size in a range between 0.2 µm and 200 µm at a solid state of aggregation at a temperature of less than 90°C.

58. (Previously presented) The method of claim 57, wherein the temperature is less than 50°C.

59. (Previously presented) The method of claim 57, wherein the particle size is between 2 µm and 40 µm.

60. (Currently amended) The method of claim 75, wherein the support is held at a temperature of at least 10° C lower as compared to the temperature of the transport units until ~~start of~~ starting the linking reaction of the monomers to the molecules on the support.

Claims 61-65 (Cancelled)

66. (Previously presented) The method of claim 75, wherein the monomers on the support are cooled and deep-frozen.

67. (Previously presented) The method of claim 75, wherein the monomers contain at least one element or bind to such particles that include an element selected from the group consisting of: magnetic constituents; diphenyl formamide; preliminary stages for monomers, dimers, trimers suitable for combinatorial synthesis; preliminary stages of D amino acids, L amino acids, nucleosides, derivatized nucleosides, mirror images thereof, derivatives thereof; polystyrene and cellulose.

68. (Previously presented) The method of claim 67, wherein the cellulose is linked with one or several layers of monomers.

69. (Currently amended) The method of claim 75, further comprising the step of, after a first cycle of linking reactions, detaching protective groups by standard methods so as to form free amino- or hydroxyl groups for linkage with preliminary stages of monomers ~~, dimers~~.

70. (Previously presented) The method of claim 75, wherein the support used is one or more selected form the group consisting of polystyrene films, paper, CDs, MODs, DVDs or FMDs.

71. (Previously presented) The method of claim 75, wherein the transport units with immobilized monomers are moved by means of applying an electrical voltage or magnetic fields.

72-74 (Cancelled)

75. (Currently amended) A method for applying substances such as monomers to a support for the combinatorial synthesis of molecule libraries, comprising the steps of:

first embedding at least two different amino acid monomers or oligonucleotide monomers in a matrix at a temperature of less than 90° C provided in the form of a solvent that is in a solid state of aggregation, thereby forming monomer-immobilizing transport units;

applying these transport units in the solid state of aggregation onto a suitable solid support by laser printing at a temperature of less than 90° C;

wherein after application to the support, the transport units are remaining in the solid state;

thereafter mobilizing the monomers and diffusing the monomers within the solvent, and

covalently linking the thus mobilized monomers to molecules located on the support <u>through a linking reaction</u>, thereby yielding a number of different monomers coupled to the support;

applying more than one layer of monomers to the support followed by a coupling of monomers to the support in precise locations, in each case followed by ~~covalent~~ <u>covalently</u> linking ~~of~~ the monomers to the support, and washing away non-linked monomers.

76. (Cancelled)

77. (Previously presented) The method of claim 85, wherein the second solvent is isopropanol.

78. (Previously presented) The method of claim 75, wherein the temperature at the embedding step is in a range between -10°C and 80° C.

79. (Previously presented) The method of claim 78, wherein the range is between 0°C and 40°C.

80. (Currently amended) A method for the combinatorial synthesis of molecule libraries comprising the steps of:

a) applying amino acid monomers or oligonucleotide monomers to a suitable solid support by positioning transport units in a solid state of aggregation at different times through laser printing on the support, the transport units comprising immobilized monomers, wherein the transport units differ from each other by the monomers immobilized within;

b) inducing a change in the state of aggregation in the immobilized monomers from solid to liquid by means of energy supply or by a chemical solvent to thereby effect a free diffusion of the monomers on the support;

c) then coupling to the support at least two different of the so diffused monomers at the same time in one single combinatorial synthesis by means of reactive groups on the support;

repeating the steps a)-c) to generate a library of different molecules at different positions,

applying more than one layer of monomers to the support followed by a coupling of monomers to the support in precise locations, in each case followed by ~~covalent~~ covalently linking ~~of~~ the monomers to the support, and washing away non-linked monomers.

81. (Previously presented) The method of claim 80, wherein the monomers in the transport units in their immobilized state are blocked from reacting with the reactive groups on the support.

82. (Previously presented) The method of claim 80, wherein the monomers for the combinatorial synthesis array are peptides or nucleic acids for forming a patterned deposition of peptide or nucleic acid monomers on the support.

83. (Currently amended) A method for the combinatorial synthesis of peptide or nucleic acid arrays comprising:

positioning by laser printing at different times a pattern of different immobilized peptide or nucleic acid monomers in the form of triboelectrically charged transport units at a solid state of aggregation to a solid support, which transport units differ from each other by the monomers immobilized within; wherein the immobilized peptide or nucleic acid monomers are temporarily blocking a coupling reaction ~~of the monomers~~ to the support ~~by reversibly immobilized monomers~~;

inducing a change in the transport units form the solid state of aggregation to a liquid state of aggregation, thereby permitting a free diffusion of the monomers;

then carrying out a coupling reaction to couple at least two different of the monomers to the support at the same time in one single combinatorial synthesis, wherein the monomers are selected from the group of amino acid monomers, nucleic acid monomers and derivatives of amino acid or nucleic acid monomers suitable for solid phase synthesis.

84. (Previously presented) The method of claim 75, wherein the laser printing is carried out with one selected form the group consisting of laser printer, laser copier and arrays of microlasers.

85. (Currently amended) A method for applying to a support for the combinatorial synthesis of molecule libraries, comprising the steps of:

first embedding at least two different amino acid monomers or oligonucleotide monomers in a matrix at a temperature of less than 90° C provided in the form of a solvent that is in a solid state of aggregation, thereby forming monomer-immobilizing transport units; thereafter dissolving the transport units in a second solvent and then applying the transport units to the support in a liquid state of aggregation by an ink jet printer at a

temperature of less than 90° C; thereafter vaporizing the second solvent completely until the transport units are taking on a solid state of aggregation,

wherein after application to the support, the transport units are remaining in the solid state;

thereafter mobilizing the monomers by electromagnetic or thermal energy or by a chemical solvent and diffusing the monomers within the solvent, and

covalently linking the thus mobilized monomers to molecules located on the support, thereby yielding a number of different monomers coupled to the support;

applying more than one layer of monomers to the support followed by a coupling of monomers to the support in precise locations, in each case followed by ~~the covalent~~ covalently linking ~~of~~ the monomers to the support, and washing away non-linked monomers.

86. (Previously presented) The method of claim 75, wherein mixtures of amino acid monomers or oligonucleotide monomers are used.